

### **REMARKS**

Applicants thank the Examiner for the very thorough consideration given the present application. Claims 1-20 are now present in this application. Claims 3 and 10 have been amended in order to more clearly recite the novel and inventive features of the present invention. Claims 11-20 have been added. No new matter has been added by way of the present amendment. Claim 3 has been amended to correct typographical errors. This amendment is supported by the Specification at page 3, Table 2. Claim 10 has been amended to properly define the process as per 35 U.S.C. 101. Support can be found at page 4. Similarly, claims 11-20 have been added to incorporate subject matter from previously filed claims 3-9. Support for these amendments can be found at pages 4-5. Accordingly, no new matter has been added. Additionally, no new issues have been raised by way of the present submission which would require additional search and/or consideration on the part of the Examiner. In view of the following amendments and remarks, Applicants respectfully request that the Examiner withdraw all outstanding rejections and allow the currently pending claims.

#### **International Preliminary Search Report**

In order to fully comply with Applicant's duty of disclosure, enclosed is a copy of the English language translation of the International Preliminary Report on Patentability.

#### **Claim Rejections under 35 U.S.C. 101**

Claim 10 stands rejected under 35 U.S.C. 101. This rejection is respectfully traversed. The Examiner states that the claim is indefinite because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process. In order to remove this rejection, Applicants have cancelled claim 10. Accordingly, this rejection is moot. Reconsideration and withdrawal thereof are respectfully requested.

Claim Rejections under 35 U.S.C. 112

Claim 3 stands rejected under 35 U.S.C. § 112, second paragraph. This rejection is respectfully traversed.

The Examiner states that the claim is indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. The Examiner indicates that claim 3 is rejected because the compound of formula II-5 is missing the chlorine substitutions on the pyridine and phenyl rings.

In order to overcome this rejection, Applicants have amended claim 3 to clarify the composition of formula II-5. Accordingly, this rejection is moot. Reconsideration and withdrawal thereof are respectfully requested.

Claim Rejections under 35 U.S.C. 103(a)

Claim 1-10 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the combined teachings of WO 98/46607 (hereinafter WO '607) and Eicken et al. (U.S. 5,589,493) (hereinafter Eicken '493) in view of the acknowledged prior art. These rejections are respectfully traversed.

In regards to claims 1-10, the Examiner states that WO '607 discloses the use of the fungicide of formula I and further discloses the possibility that this fungicide may be combined with other fungicides. Eicken '493 discloses the amine compound of formula II and further discloses the possibility of combined use with other fungicides. As conceded by the Examiner, WO '607 does not disclose or suggest the use of the fungicide of formula I with the specific amine compound of formula II, nor does Eicken '493 disclose or suggest combining the described amine compound with the specific fungicide of WO '607.

It is respectfully noted that the Examiner has failed to present objective evidence that would indicate that it would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to combine the fungicide disclosed by WO '607 with the amine compound of Eicken '493. It is not obvious to combine references merely because the references disclose that compounds are well known and have the capacity to be combined with others, as the Examiner

claims (Non-final Office Action dated 2/22/06, page 5). References cannot be arbitrarily combined. There must be some reason why one of ordinary skill in the art would be motivated to make the proposed combination of the primary and secondary references. In re Nomiya, 184 USPQ 607 (CCPA 1975). The test for combining references is what the combination of disclosures taken as a whole would suggest to one of ordinary skill in the art. In re McLaughlin 170 USPQ 209 (CCPA 1971).

Although WO '607 discloses that the fungicide of formula I may be combined with other fungicidal compounds and provides a list that includes one hundred and forty nine compounds that may be combined with the fungicide (see WO 98/46607, pages 17-18), it is noted that there is absolutely no mention of the amine compound of formula II as a possible fungicidal compound that may be added to the fungicide of formula I. One of ordinary skill in the art at the time of the invention would have been motivated to combine the fungicide of WO '607 with any one of the one hundred and forty nine compounds disclosed by the reference. It might even be possible that one of ordinary skill in the art would have been motivated to combine the fungicide of WO '607 with compounds that are similar to those disclosed by WO '607, in anticipation of an expected result. However, it is respectfully submitted that one of ordinary skill in the art would not have any basis for a motivation to combine the fungicide disclosed by WO '607 with the amine compound of Eicken '493.

Similarly, Eicken '493 discloses that the described nicotinic anilide derivative may be combined with other fungicides. Eicken '493 provides a list of eighty fungicides with which the anilide may be combined (see Eicken '493, columns 35-37). Once again, there is absolutely no mention of the fungicide of formula I as a possible mixture compound. As discussed above, one of ordinary skill in the art at the time of the invention would have been motivated to combine the compound of Eicken '493 with any one of the eighty compounds disclosed by the reference, or compounds that are closely similar to those disclosed, in anticipation of an expected result. However, one of ordinary skill in the art would not have been motivated to combine the fungicide disclosed by WO '607 with the amide compound of Eicken '493.

Because the combinations, as set forth in Applicants' claims, are not disclosed or made obvious by the cited prior art, reconsideration and withdrawal of this rejection is respectfully requested.

*Present Invention Advantages*

As noted above, none of the prior art cited by the Examiner shows or suggests a combination as recited in independent claim 1 of the instant invention. Accordingly, it is respectfully submitted that the present application is in condition for allowance.

However, assuming arguendo that the Examiner has made a prima facie case of obviousness under 35 U.S.C. 103, it is noted that Applicants have provided evidence of unexpected results that rebut such obviousness. When a chemical composition is claimed, a prima facie case of obviousness under § 103 may be established by the PTO's citation of a reference to a similar composition, the presumption being that similar compositions have similar properties. See *In re Dillon*, 919 F.2d 688, 692 (Fed. Cir. 1990) (en banc). One way for a patent applicant to rebut a prima facie case of obviousness is to make a showing of "unexpected results," i.e., to show that the claimed invention exhibits some superior property or advantage that a person of ordinary skill in the relevant art would have found surprising or unexpected. The basic principle behind this rule is straightforward -- that which would have been surprising to a person of ordinary skill in a particular art would not have been obvious. *In re Soni*, 54 F.3d 746, 750 (Fed. Cir. 1995).

The instant invention is directed to methods for controlling harmful fungi. As disclosed by Applicants, the compounds of formula I and formula II have been known in the art for a number of years. However, until Applicants' research studies, they had never been combined before.

Applicants have provided the results of studies that are reproducible, include comparative data vis a vis controls or untreated specimens and, furthermore, are analyzed using analytical methods accepted by the scientific community, such as the Abbot and Colby methods.

As evidenced by Tables B and D in Applicant's Specification, one of ordinary skill in the art at the time of the invention would not have been motivated to combine the fungicide of

formula I with the amine compound of formula II, because the expected efficacy of such a combination would have been very low, in some cases 0%. However, Applicants have discovered that the mixture of these compounds unexpectedly produces a synergistic effect, with mixture efficacies of up to 100% at certain specific concentrations (See Table D, Example 11). Applicants' evidence demonstrates significantly improved and unexpected results. When an applicant demonstrates substantially improved results and states that the results were unexpected, this is sufficient to establish unexpected results in the absence of evidence to the contrary. *In re Soni*, 54 F.3d 746, 751 (Fed. Cir. 1995). Furthermore, given a presumption of similar properties for similar compositions, substantially improved properties are ipso facto unexpected. *Id.*

### Conclusion

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. Prompt and favorable consideration of this Amendment is respectfully requested.

If any questions arise in the above matters, please contact Applicant's representative, Andrew D. Meikle (Reg. No. 32,868), in the Washington Metropolitan Area at the phone number listed below.

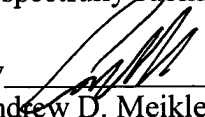
Application No. 10/532,770  
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Docket No.: 5000-0123PUS1

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

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Respectfully submitted,

By   
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